Sewer System Management Plan

The Sanitary Sewer Management Plan, prepared by the Operations Services Department, outlines and documents the activities that the City utilizes to manage its wastewater collection system effectively. Effective management of a collection system includes:

- Minimizing the number and impact of sanitary sewer overflows (SSOs)
- Providing adequate sewer capacity to convey peak flows, and
- Maintaining and improving the condition of the collection system infrastructure to provide reliable service into the future.

DOCUMENT ORGANIZATION

This SSMP has been prepared by City of Pleasanton Department of Operations Services, Environmental Services Division staff in compliance with requirements of the San Francisco Bay Regional Water Quality Control Board (RWQCB) pursuant to section 13267 of the California Water Code.

The SSMP is intended to meet the requirements of both the RWQCB and the Statewide General Waste Discharge Requirements (GWDR).

The SSMP includes eleven elements as listed below. Each of these elements forms a section of this document.

SSMP ELEMENTS

Sewer System Management Plan

October 2014

CIWQS WDID: 2SSO10167

Last Updated in 2008

City Council Adoption: January 6, 2015

I. INTRODUCTION

A. Sewer System Management Plan

This Sewer System Management Plan (SSMP) has been prepared by the City of Pleasanton's Operations Services Department, Environmental Services Division. It consists of policies, procedures, and activities that are included in the planning, management, operation, and maintenance of the City's sanitary sewer system.

The State Water Resources Control Board (SWRCB) has issued Statewide Waste Discharge Requirements for sanitary sewer systems, which include requirements for development of an SSMP. This SSMP is intended to meet the requirements of the San Francisco Bay Regional Water Quality Control Board and the State Water Resources Control Board. Specifically, it follows the General Waste Discharge Requirements (GWDR) for Wastewater Collection Agencies, State Water Resources Control Board Order Number 2006-0003 dated May 2, 2006 and amended by the revised Monitoring and Reporting Program (MRP) in Order WQ 2013-0058-EXEC, dated September 9, 2013.

The structure (element numbering and nomenclature) of this SSMP follows the General Waste Discharge Requirements (GWDR) for Wastewater Collection Agencies. . The City's waste discharger identification number (WDID) in the California Integrated Water Quality System (CIWQS) is 2SSO10167.

B. Sanitary Sewer System Facilities

City of Pleasanton

The City operates a sanitary sewer system that serves a residential population of approximately 70,300 in a 24 square mile service area. The sewer system consists of about 255 miles of gravity sewers, approximately 25,192-feet of force main, and ten pump stations. Average Daily Dry Weather flow is 7 million gallons per day (MGD). The sewers range in size from 4-inch to 36-inch diameter.

The City also receives wastewater from the Castlewood Area of Alameda County.

Sewer service laterals are owned by, and therefore the responsibility of, the property owner to maintain and assure serviceability. The City may provide maintenance services to laterals located within the public right of way as a courtesy service if a property line cleanout exists, and the cleanout and adjacent area are accessible to City staff and equipment. The City will not perform repair, rehabilitation, or replacement of any portion of sewer service laterals located on private property. There are 26,336 lateral connections within the City.

Table 1-1 Sewer System Size Distribution

Diameter	Total Linear Feet	Portion of Sewer System
Unknown	699	0.05%
2.5 inch	677	0.05%
4 inch	8,851	0.66%
6 inch	156,188	11.59%
8 inch	916,597	68.04%
10 inch	107,360	7.97%
12 inch	30,135	2.24%
14 inch	341	0.03%
15 inch	45,512	3.38%
16 inch	3,139	0.23%
18 inch	30,077	2.23%
19 inch	988	0.07%
21 inch	6,532	0.48%
24 inch	10,378	0.77%
27 inch	14,691	1.09%
30 inch	11,463	0.85%
36 inch	3,499	0.26%
Total	1,347,127	100.00%

Table 1-2 Sewer System Materials of Construction

Material	Total Number of Feet	Portion of Sewer System
VCP	830,151	61.64%
PVC	428,219	31.79%
ACP	24,996	1.86%
DIP	14,075	1.05%
RCP	12,999	0.97%
PBUTEL	3,449	0.26%
HDPE	2,338	0.17%
CIP	1,374	0.10%
ABS	911	0.07%
Steel	80	0.01%
Unknown	28,285	2.10%
Total	1,346,877	100.00%

C. Definitions, Acronyms, and Abbreviations

Acrylonitrile Butadiene Styrene (ABS)

Asbestos-Cement Pipe (ACP)

Bay Area Clean Water Agencies (BAWCA)

Best Management Practices (BMP)

Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes and utensils prior to washing.

Calendar Year (CY)

California Integrated Water Quality System (CIWQS)

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

California OES Office of Emergency Management (Cal OES)

Refers to the California Office of Emergency Management.

Capital Improvement Plan (CIP)

Refers to the document that identifies future capital improvements to the City's sanitary sewer system.

Cast Iron Pipe (CIP)

City

Refers to the City of Pleasanton.

Closed Circuit Television (CCTV)

Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

Computerized Maintenance Management System (CMMS)

Refers to a database application used manage and document maintenance activities of a collection system.

Drain Inlet (D/I)

Ductile Iron Pipe (DIP)

Dublin San Ramon Service District (DSRSD)

Provides treatment and disposal of City's wastewater stream. Administers and enforces Source Control within the City.

Duty Operator

Refers to the City of Pleasanton weekend and on-call worker.

Environmental Services (ES)

Refers to City of Pleasanton Environmental Services. This is a section within the Utilities Division and which is part of the Operations Services Department.

Fats, Oils, and Grease (FOG)

Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

Fiscal Year (FY)

Food Service Establishment (FSE)

Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.

Full-time Equivalent (FTE)

Refers to the equivalent of 2,080 paid labor hours per year by a regular employee.

General Waste Discharge Requirements (GWDR)

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006, and amended by the revised monitoring and reporting program (Order WQ 2013-0058-EXEC) dated September 9, 2013.

Geographical Information System (GIS)

Refers to the City's system that it uses to capture, store, analyze, and manage geospatial data associated with the City's sanitary sewer system assets.

Global Positioning System (GPS)

Refers to the handheld unit that can be used to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

Grease Removal Device (GRD)

Installed and engineered device to allow for the separation of lighter oils and greases from discharges to sewers

High Density Polyethylene Pipe (HDPE)

Infiltration/Inflow (I/I)

Refers to water that enters the sanitary sewer system from storm water and groundwater and increases the quantity of flow. Infiltration enters through defects in the sanitary sewer system after flowing through soil. Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).

Lateral

Refers to the piping that conveys sewage from a building to the City sewer system. The distinction is sometimes made between the upper lateral (from building to public right-of-way) and the lower lateral (from public right-of-way to the sewer main).

Legally Responsible Official (LRO)

Refers to the individual designated by the City to certify SSO reports on the CIWQS system. The LRO must be formally designated by the City and registered with the SWRCB.

Manhole (M/H)

Million Gallons per Day (MGD)

Monitoring and Reporting Program (MRP)

Refers to the revised monitoring and reporting requirements included in Order WQ 2013-0058-EXEC, dated September 9, 2013.

Pleasanton Call Center and Communications Contacts

The City of Pleasanton operates two communication centers. During normal business operations, calls are received by Pleasanton Call Center. During all other hours, calls are received by Pleasanton Police directly, the City's 911 system which is staffed 24/7. For the purpose of this SSMP, both may be referred to as Dispatch

Operations and Maintenance (O&M)

Operations Services Department (OSD)

Operations Service Center (OSC)

Overflow Emergency Response Plan (OERP)

For the purpose of this SSMP, this plan will be referred to as the Sanitary Sewer Overflow Response Plan (SSORP).

Polyvinylchloride Pipe (PVC)

Preventive Maintenance (PM)

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g. cleaning, CCTV, repair).

Property Damage Overflow

Refers to a sewer overflow or backup that damages a property owner's premises.

Regional Water Quality Control Board (RWQCB)

Refers to the San Francisco Bay Regional Water Quality Control Board.

Reinforced Concrete Pipe (RCP)

Supervisory Control and Data Acquisition (SCADA)

Data based computer controller, date compiler and Alarm system

Sanitary Sewer Overflow Response Plan (SSORP)

Refers to the City's Overflow Emergency Response Plan which is a component of this SSMP that addresses the City's response to SSO events.

Sanitary Sewer Overflows (SSOs)

Refers to the overflow or discharge of any quantity of partially treated or untreated wastewater from the sanitary sewer system at any point upstream from the wastewater treatment plant. SSOs are typically caused by blockages, pipe failure, pump station failure, or capacity limitation.

Sanitary Sewer System

Refers to the portion of the sanitary sewer facilities that are owned and operated by the City of Pleasanton.

Sewer System Management Plan (SSMP)

SSO Report

Refers to sanitary sewer overflow report.

State Water Resources Control Board (SWRCB)

Refers to the California Environmental Protection Agency (EPA) State Water Resources Control Board and staff responsible for protecting the State's water resources.

Supervisory Control and Data Acquisition (SCADA)

Refers to the system that is employed by the City to monitor the performance of its pump stations and to notify the operating staff when there is an alarm condition that requires attention.

Vitrified Clay Pipe (VCP)

Water of the State

Water of the State means any water, surface or underground, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be waters of the State unless the sewage is completely contained and returned to the sewer system. May also be referred to as surface water(s) or State waterway.

D. References

New Requirements for Preparing Sewer System Management Plans, California Regional Water Quality Control Board San Francisco Bay Region letter to Sewer System Authorities, July 7, 2005 www.cwea.org/conferences/sso/Reg2Letter-SSMP0705.pdf.

Sewer System Management Plan (SSMP) Development Guide, San Francisco Bay Regional Water Quality Control Board in cooperation with Bay Area Clean Water Agencies, July 2005

www.waterboards.ca.gov/sanfranciscobay/publications_forms/documents/SSMP%20Development%20Guide%20-%20Final.pdf

State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, May 2, 2006, with Revised Monitoring and Reporting Program, Order WQ-2013-0058-EXEC

General Order:
www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

Revised Monitoring and Reporting Program

www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2013/wqo2013_0058exec.pdf

II. GOALS

A. Introduction

This section identifies goals the City has set for the management, operation and maintenance of the sewer system and discusses the role of the SSMP in supporting these goals. These goals provide focus for City staff to continue the high-quality work to implement the improvements in the management and maintenance of the City's wastewater collection system.

B. Regulatory Requirements

State GWDR Requirement:

The collection system agency must develop goals to properly manage, operate, and maintain all parts of its wastewater collection system in order to reduce and prevent SSOs, as well as to mitigate any SSOs that occur.

C. Goals for the Wastewater Collection System

Providing safe, responsive, and reliable sewage conveyance is a key component of the goals and objectives of the City's Operational Services Department, Environmental Services Division.

The City's Sewer Collections Section has adopted the following goals**.** These goals outline responsibilities and provide direction and understanding for all sewer maintenance and cleaning activities.

- Provide for the reliable collection of sewage throughout the City to protect public health and the environment, to prevent sanitary sewer overflows and to minimize odors.

- Ensure all sanitary sewage is collected and transported to the Water Pollution Control Plants.
- Maintain and repair the City's Sanitary Sewer Collection System in a cost-effective, safe, reliable and timely manner.
- Comply with all federal, state, and local laws and regulations pertaining to sanitary sewer collection operation and maintenance.
- Respond to emergency events and provide assistance for residents and businesses.
- Provide administrative and support services to promote customer satisfaction and confidence. Continue to professionally manage, operate and maintain all parts of the sewer collection system.
- Provide adequate capacity to convey peak flows.
- Minimize the frequency of SSOs that can pose a threat to public health.
- Mitigate the impact of SSOs.

This SSMP supplements and supports the City's existing Maintenance and Operations Program and goals by providing high-level, consolidated guidelines and procedures for all the aspects of the City's wastewater system management. The SSMP will contribute to the proper management of the collections system and assist the City in minimizing the frequency and impacts of SSO's by providing guidance for appropriate maintenance, capacity management and emergency response.

D. Goals, Policies, and Action Statements:

The City's General Plan contains Goals, Policies and Action Statements applicable to the wastewater collection system. Refer to the City's General Plan web page at:
http://www.cityofpleasantonca.gov/business/planning/genplan-090721-final.html

III. ORGANIZATION

A. Introduction

This section of the SSMP identifies City staff responsible for implementing this SSMP, responding to SSO events and meeting the SSO notification and reporting requirements. It also includes the designation of the Legally Responsible Official (LRO), who is responsible for completing and certifying spill reports submitted to the SWRCB's on-line reporting system (CIWQS). This section fulfills the organization requirement of the SWRCB (Element 2) SSMP requirements.

B. Regulatory Requirements

State GWDR Requirement:

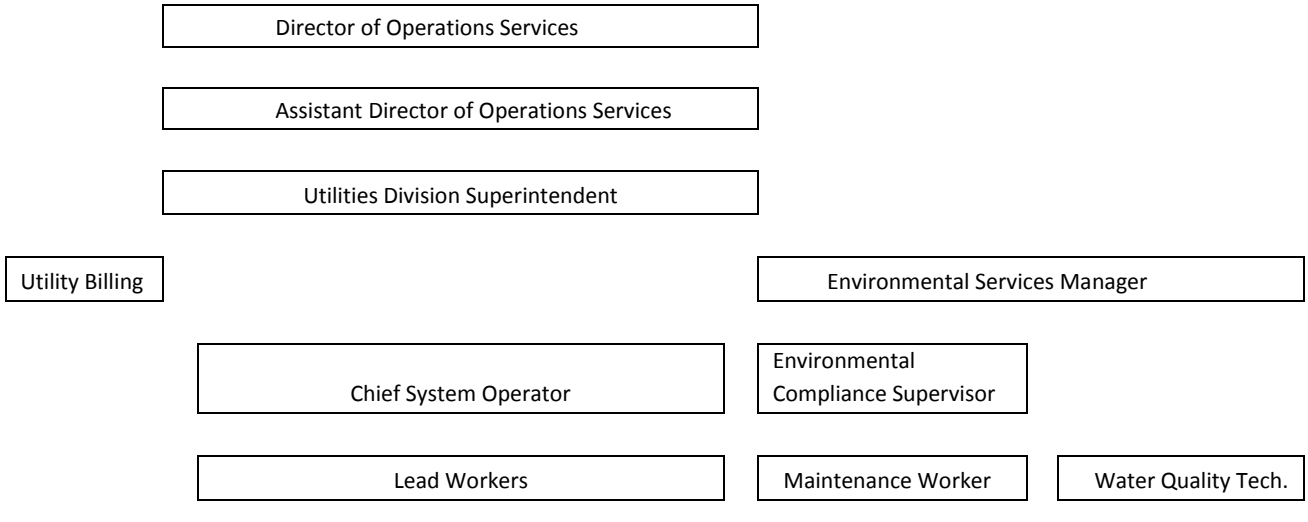
The collection system agency's SSMP must identify:

1. The name of the responsible or authorized representative;
2. The names and telephone numbers for management, administration, and maintenance positions responsible for implementing specific measures in the SSMP program. Include lines of authority as shown in an organization chart or similar document with a narrative explanation; and
3. The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board and/or the California Office of Emergency Services (Cal OES).

C. Organization and Staffing

The organization chart for the management, operation and maintenance of the City's Utilities Division system is shown on Figure 2-1. General Responsibilities are described below. Table 2-1 is a listing of telephone numbers for key positions.

Figure 2-1 Organization Chart for Operations Services Department, Utility Division



Utility System Operators II

Utility System Operators I

Maintenance Workers

Table 2-1. Contact Numbers for Key OSD Positions

Call Center	931-5500
Police Department	931-5122
Director of Operations Services	931-5509
Assistant Director of Operations Services	931-5505
Utilities Division Superintendent	931-5523
Environmental Services Manager	931-5507
Environmental Compliance Supervisor	931-5527
Chief System Operator	931-5521
On-Call Staff	437-3992

Description of General Responsibilities

Director of Operations Services

Provides overall management of the Operations Services Department, consisting of Environmental Services, Utilities and six other divisions. Along with the City Manager, City Attorney, and other Department heads, serves as a member of the City's Executive Leadership Team.

Assistant Director of Operations Services

Provides general direction to the Water Distribution and Sewer Operations Programs; Oversees Utility Billing and Call center activities, acts as the Director of Operations Services in the Director's absence or at the Director's discretion.

Utilities Division Superintendent

Under general direction from the Assistant Director, the Utilities Division Superintendent provides general direction to the Water Distribution and Sewer Operations Supervisors and Lead Workers; may act as the Director of Operations Services at the Director's discretion. This manager plans, organizes, directs, and coordinates the activities of the City's Water distribution and Wastewater Collections system programs.

Environmental Services Manager

Under general direction from the Assistant Director, the Environmental Services Manager provides oversight and implementation of environmental programs within the Operations Services Department. This position acts as the city liaison with all regulatory agencies.

Environmental Compliance Supervisor

Under direction from the Environmental Services Manager, the Environmental Compliance Supervisor implements provisions of environmental programs within the Operations Services Department, and coordinates operations with all OSD Divisions.

Chief Utility System Operator

Under general direction from the Utilities Superintendent, supervises the activities of lead personnel, field crews and individuals in the maintenance and repair of public utilities within the Operations Services Department.

Lead Workers

Under general direction, works with and leads field crews and individuals in the maintenance and repair of public utilities including, but not restricted to water service distribution lines, works with and leads field crews and individuals in the maintenance and repair of public utilities including, but not restricted to, storm drains, sanitary sewers and water systems; does related work as required.

Utility System Operator ll

Under general direction, performs skilled manual tasks in the construction, repair, and maintenance of water service distribution lines, sanitary sewers, storm drains, and supporting facilities; operates motorized equipment; occasionally leads small field crews; performs related work as required.

Utility System Operator I

Under general supervision, performs a variety of semi-skilled and skilled manual tasks in the construction, repair and maintenance of water service distribution lines, sanitary sewer and storm drain facilities; operates motorized equipment; performs related work as required.

Operations Services Department Worker

Under direct supervision this classification is a generalist that performs manual tasks supporting the work of the Lead Workers, And Utility Operator classifications.

Crew Assignments:

The Utilities Division Superintendent oversees the entire Program. The Chief Utility System Operator Supervisor oversees the day to day operation. The Lead Workers generally rotate duties which include: leading crews; operating hydro-flushers; operating CCTV equipment; performing underground utility locates (USA); and being on-call. Hydro-flushing, CCTV, locating, pump and lift station preventive maintenance, and general maintenance and construction duties are shared amongst Utility System Operators.

The construction crew makes needed repairs of the city water service lines and the sanitary sewer system which includes but is not limited to: mains, laterals, pump/lift stations, manholes, and repairs or installs property line clean outs. The hydro-flushing crew performs all cleaning of City sewer mains. Hydro-flushing uses high pressure water to clean the sewer mains.

The CCTV crew performs televising and condition assessment of the sanitary sewer collection system piping using a robotic pipe inspection camera system and software.

The Duty Operator performs routine rounds and receives and responds to water distribution, sanitary and storm sewer calls and emergency response requests for water and wastewater issues as required.

Employees also perform all city utility USA locates.

Legally Responsible Official

The City's authorized representative in all wastewater collection system matters is the Director of Operations Services. The Utilities Division Superintendent is authorized to act in Director's absence. The Director or the Director's designee is the Legally Responsible Official (LRO) for purposes of CIWQS reporting and certification.

Responsibility for SSMP Implementation

The Environmental Services Manager is responsible for implementing all elements of this SSMP. The Environmental Compliance Manager coordinates with the Planning Department regarding proposed construction projects.

SSO Response and Reporting Chain of Communication

The SSO reporting process is described in Element VI: Overflow Emergency Response Plan. The Sanitary Sewer Overflow Response Plan (SSORP) also demonstrates the chain of communication for responding to and reporting SSO's from observation of an SSO to reporting the SSO to the appropriate agencies. Table 2-1 above lists the contact phone numbers for the parties involved in the chain of communication.

IV. LEGAL AUTHORITY

A. Introduction

This section of the SSMP discusses the City's Legal Authority, including the Municipal Code and agreements with other agencies.

B. Regulatory Requirements

The summarized requirements for the Legal Authority section of the SSMP are:

State GWDR Requirement:

The Wastewater Collection System Agency must demonstrate, through collection system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

(a) Prevent illicit discharges into its wastewater collection system (examples may include infiltration and inflow (I/I), storm water, chemical dumping, unauthorized debris and cut roots, etc.);

(b) Require that sewers and connections be properly designed and constructed;

(c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City;

(d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages;

(e) Enforce any violation of its sewer ordinances;

(f) Authority to inspect grease producing dischargers [from GWDR FOG provisions], and

(g) Authority to enforce sewer-related ordinances

C. City of Pleasanton Municipal Code

The ***Pleasanton Municipal Code,*** Chapter 15, describes the City's current legal authorities. The legal authorities provided by the Municipal Code and other sources that address the regulatory requirements are summarized in Table 3-1.

Table 3-1. Summary of Legal Authorities in Municipal Code and Other Sources

Requirement	Municipal Code Reference	Meets GWDR Requirements
General		
Prevent illicit discharges into the wastewater collection system	Chapter. 15.28.010	Yes
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	Chapter 15.28.010 Chapter 15.28.060 Chapter 15.44.010	Yes
Require that sewers and connections be properly designed and constructed	Chapter 15.24.040 Chapter 15.32.010 Chapter 15.44.050	Yes
Require proper installation, testing, and inspection of new and rehabilitated sewers	Chapter 15.32.020 Chapter 15.32.070 Chapter 15.32.080	Yes
Maintenance and Inspection, including Laterals		
Clearly define City responsibility and policies	Chapter 15.32.100	Yes
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the City	Chapter 15.28.170	Yes
FOG Source Control		
Requirements to install grease removal devices, design standards for the grease	Chapter 15.44	Yes

removal devices, maintenance, BMP, record keeping and reporting requirements	Ordinance #1984	
Authority to inspect grease producing facilities	Chapter 15.44.070	Yes
Enforcement		
Enforce any violation of sewer ordinances	Chapter 15.12	Yes

The City's legal authority does not require the control of infiltration and inflow (I/I) from private service laterals. (The GWDR has no equivalent requirement). However, inflow and infiltration is not currently a significant issue for the City. Average daily flows during rain events are typically only 10-30% above dry weather flows, and the sewer system has not historically experienced capacity-related SSOs.

D. Agreements with Satellite Agencies

Dublin San Ramon Service District (DSRSD) and City of Livermore both provide for the treatment and disposal of wastewater emanating from the City's sanitary sewerage service area.

Within the 1992 contract the City delegates all authority, rights and power to administer and enforce a Source Control program to DSRSD

The City has mutual aid agreements and cooperation with the neighboring agencies including DSRSD, San Francisco Water Division, Zone 7 Water Agency and the City of Livermore.

V. OPERATIONS AND MAINTENANCE PROGRAM

A. Introduction

This section is intended to provide an overview of the City's sewer system operations and maintenance (O&M) program.

B. Regulatory Requirements

State GWDR Requirement (Operations and Maintenance)

(a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;

(b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;

(c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;

(d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and

(e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

C. Operations and Maintenance Program

Collection System Maps

The City has a Geographical Information System (GIS) that includes information for wastewater collection system assets including: gravity line segments, manholes, pumping facilities, and pressure pipes (force mains). The City also has information in its GIS for the storm drainage system. The GIS information is available to internal City staff. In addition, staff carries a list and maps of identified sewer "Bad Spots"

Preventive Operations and Maintenance

The elements of the City's sewer system O&M program include:

Proactive, preventive and corrective maintenance of gravity sewers;

CCTV inspection;

Rehabilitation and replacement of sewers that are in poor condition;

Periodic inspection and preventive maintenance for the pump stations;

All Utility employees are trained on the use of field equipment; and

Utility staff incorporates the use of Computerized Maintenance Management System (CMMS) to Monitor Preventative tasks performed associated with preventive O&M Tasks

Gravity Sewers

The City proactively cleans the sewer system every 3 to 5 years, and preventively cleans "Bad Spot" sewers with a history of issues on an enhanced frequency cleaning interval as necessary. The City has one hydro-flusher and two combination (hydro/vacuum) units it uses for the cleaning or maintenance of its sewer mains. Enhanced frequencies are scheduled at 1,3,6 and 12 month intervals for main lines that require more frequent cleaning, and lines are placed into those frequencies depending upon specific conditions in individual main lines segments. Approximately 197,700 feet or about 15% of the system are in the enhanced frequencies ("Bad Spot") category.

CMMS is used to track history for sewer line maintenance, and provide other O&M related functions.

Utilities Division staff performs Root Cutting operations in defined areas every two years.

Table 4-1 Gravity Sewer Preventative Maintenance Summary

Year	Sewer Lines Video (ft.)	Sewer Lines Flushed (ft.)	"Bad Spot" Cleaning activities			
			30 days	90 days	180 days	360 days
2008	160,000	182,000	28	3	14	13
2009	175,000	175,000	28	3	14	13
2010	175,000	138,000	28	3	14	13
2011	65,676	82,235	28	3	14	13
2012	50,418	24,729	28	3	14	13
2013	49,674	73,507	28	3	14	13

CCTV Inspection

Most Utilities Division staff has been trained in the use of the CCTV equipment. There is no formal system to assess and evaluate findings from this activity. All assessment is based on historical experience which is obvious to the operators as they have experience. They entire system is televised every 7 years.

Rehabilitation and Replacement

The information gathered during the CCTV condition assessment will be used to select individual gravity sewers for repair, rehabilitation, or replacement. The general criteria for sewer replacement are to focus on those areas identified as “Bad Spots”. The replacement or rehabilitation is also considered each time water service line or street repairs are performed.

In 2010 the City replaced a 6” sewer line that created a capacity problem and a manhole was modified to alleviate a blockage problem.

Funding for the Capital Improvement Program is derived from the City’s Sewer Fund. The sewer fund is an enterprise fund; sewer fees are established on the basis of projected needs and are updated periodically. The budget and project description are currently included in the City’s Capital Improvement Program. This listing is included in the Sewer System Master Plan.

Wastewater Pump/Lift Stations Inspections and Maintenance

The Duty Operator inspects the operation of Sewage Lift Stations daily. Maintenance activities include: inspecting the site; verifying pump operation; rotating pumps and, grease and debris removal. The stations can be powered by trailer-mounted generators during power outages.

Replacement Parts

The City has informal agreements with neighboring agencies for equipment support in the event the sewer maintenance equipment fails. However, the Division maintains an inventory of routine parts for repair of sewer mains and laterals and various electrical components for the City's lift stations.

Operation and Maintenance Resources

Utilities Division staff positions dedicated to the maintenance of the collection system facilities are listed in Table 4-1. These positions also receive administrative and clerical support provided by the Operations Services Department. Table 4-2 lists the major equipment currently used in the Operation and Maintenance of the collection system.

Table 4-2 Utilities Division Staff Resources

Title	No. of FTE's
Director of Operations Services	1
Assistant Director of Operations Services	1
Utilities Division Superintendent	1
Environmental Services Manager	1
Chief Utility System Operator	1
Environmental Compliance Supervisor	1
Water Quality Technician	1
Lead Workers	4
Utility System Operators ll	4
Utility System Operators l	6
Maintenance Workers	6
Total	**27**

Table 4-2 Major Specialized Equipment

Year	Model Description
2005	Vaccon vacuum-jetter combination truck
1998	Vaccon vacuum-jetter combination truck
2005	Sreco jetter sewer cleaner truck
1977	Rockwell rodder sewer cleaner
2001	Gorman Rupp portable pump station trailer 1500 GPM
1987	Tate trash pump trailer 1300 GPM
2002	Multiquip trash pump trailer 600 GPM
1991	Oswald generator trailer 50 KW
1987	Tate generator trailer 100 KW
1968	Oswald generator trailer 20 KW
1986	Caterpillar generator trailer 250 KW
2003	Caterpillar generator trailer 400 KW
2003	Two (2) sets confined space entry equipment
Various	Pneumatic sewer plugs, 3-6", 2-8", 3-8" to 12"variable, 2-12" to 18" variable, 2-18" to 30" variable, 1-24" to 48"variable

The Sewer Division stockpiles material necessary for normal operations and maintenance. Pipe, full circle clamps, and dresser couplings are stored and maintained in minimum quantities for most emergencies.

Training

The City uses a combination of in-house classes, on the job training, CWEA conferences, seminars, and other training opportunities to train its Utilities staff. The City strongly encourages staff to advance their CWEA certification grade, provides financial support for certifications and CWEA, and provides training and advancement opportunities. Senior staff is actively involved in leadership roles in Bayworks (CWEA) and Alameda Clean Water Program.

Annual training on the City's SSMP and SSORP is conducted for all Utility employees. The City also maintains an ongoing safety training program that addresses both general and task-specific safety issues. The Tailgate Schedule lists safety training activities for the Utilities Division Program. This schedule is updated annually.

The City's contract language requires contractors working in the wastewater collection system to provide training for their employees in the activities that may cause SSOs and in responding to contractor-caused SSOs. The contractor must also follow OSHA Confined Space Protocols.

Outreach to Sewer Service Contractors

The City maintains an active list of available contractors as part of the Emergency Water Plan. The water emergency in this context is any situation that would require immediate action beyond the scope of normal City operations.

VI. DESIGN AND PERFORMANCE PROVISIONS

A. Introduction

The City's design and construction standards are used by the City Staff and they are communicated to consulting engineers and/or developers at the start of a design process or proposed development.

B. Regulatory Requirements

State GWDR Requirement (Design and Performance Provisions)

(a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and

(b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

C. Design and Construction Standards

2011 Edition of the Standard Specifications and Details

The scope and purpose of these City Standard Specifications are to provide minimum standards for materials used and methods of construction for the City's public infrastructure including streets, water, sanitary sewer, and storm drainage facilities. The City Standard Specifications are to be used in conjunction with the City Standard Details. These minimum standards shall apply to City capital improvement and private development projects.

The City uses consultants to design new stations and reviews their design standards. The City follows Caltrans standards for inspecting and testing. The City primarily uses consultants to oversee the installation. For pipe lines the City does have its own standards and procedures which are located in the City Standard Plans.

VII. SANITARY SEWER OVERFLOW RESPONSE PLAN

A. Introduction

The City of Pleasanton's Operations Services Department, Utilities Division is responsible for the operation and maintenance of the sanitary sewer system. The system consists primarily of gravity flow lines and Pump Stations that discharge to City of Livermore and Dublin San Ramon Service District's Wastewater Pollution Control Plant (WPCP).

Purpose

The Sanitary Sewer Overflow Response Plan (SSORP) is designed to ensure that every report of a confirmed sanitary sewer overflow (SSO) is immediately dispatched to the appropriate crews. This plan provides a procedure that, when enacted in response to the sewer overflow/spill, would reduce or eliminate public health hazards, prevent unnecessary property damage, and minimize the inconvenience of service interruptions. This plan provides procedures for City staff to follow when responding to, cleaning up and reporting SSOs.

Objectives

The primary objectives of the Sanitary Sewer Overflow Response Plan are to:

Protect public health and the environment;

Protect collection system personnel;

Protect private and public property;

Respond quickly to minimize the volume of the SSO;

Satisfy regulatory agencies and waste discharge permit requirements;

Minimize enforcement actions against the City; and

Safeguard the infrastructure of the collection system.

Safety

Whenever qualified City personnel respond to a report of an overflow/spill, they may encounter an emergency situation that requires immediate action. The most critical aspect of resolving an incident of this nature is to safely and competently perform the actions necessary to return the system or facility to normal operations as soon as possible.

The most important item to remember during this type of incident is that safe operations always take precedence over expediency or shortcuts. Safety also takes precedence over regulatory notifications and reporting.

Upon arrival at a SSO, the Duty Operator will conduct a hazard assessment to determine potential safety hazards. There is always a possibility that a sewage overflow may contain unknown hazardous waste or chemicals. On rare occasions, gasoline and industrial solvents have been found in the sewer system. If a hazardous waste is suspected, the responding field crew should notify Public Safety Communications immediately and request the Fire Department's Hazardous Materials Response Team.

The Environmental Compliance Supervisor or Chief Utility System Operator should also be notified of a SSO as soon as possible. Personnel shall stay clear of any hazards and secure the area from the public.

Depending on the nature or cause of the SSO, personnel may be required to remove a mainline blockage with a hydro-flusher, repair a damaged section of pipeline, or wash/clean a City street. At this point, it is essential that all standard safety procedures and/or duties are followed as deemed appropriate.

Typical responses may require personnel to implement the following types of safety procedures:

- Standard personal protective equipment (PPE);
- Confined space entry procedures;
- Traffic control;
- Heavy equipment operation; and/or
- Adequate communication via two-way radio and/or cellular telephone.

B. Regulatory Requirements

State GWDR Requirement (Overflow Response Plan)

The collection system agency shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

(a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
(b) A program to ensure appropriate response to all overflows;
(c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination System (NPDES) permit requirements. The Sewer System Management Plan should identify the officials who will receive immediate notification;
(d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
(e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
(f) A program to ensure that all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to Waters of the United States and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

C. Sanitary Sewer Overflow Response Plan

COLLECTION SYSTEM SERVICE CALL RESPONSE, AND SANITARY SEWER OVERFLOW RESPONSE, HANDLING AND REPORTING

This procedure is intended to outline the minimum steps to be taken by City personnel. The procedural steps indicated are general in nature. All steps will not apply in all cases. Additional steps may be necessary in some cases. The procedures must be used with common sense based on experience with the Collection System and applicable regulatory provisions.

It is the responsibility of the Utilities Division Superintendent, under the supervision of the Director of Operations Services to ensure that the service calls are handled in the manner as herein described. The Environmental Services Manager will assure all appropriate reports are prepared and filed for City use or as may be required by regulatory agencies.

RECEIVING A CALL/RECORDING VITAL INFORMATION

A. Calls Received by Call Center (Working Hours M-F 0700 to 1515 Hrs.)

Notify the Duty Operator or Chief Utility System Operator

B. Calls received by Police Department Personnel; After Hours,Weekends,Holidays

Contact Duty Operator at his/her home or standby cell phone **(925) 437-3992**.

The Chief Utility System Operator is responsible for insuring that a Duty Operator is always on call. Monday-to-Monday standby is rotated among the Duty Operators, and employees may trade this duty. When a trade is made the worker assuming standby duties shall notify the Chief Utility System Operator.

C. Lift Station Related Service Calls

Wastewater Lift Stations are equipped with a multiple alarms that send information of critical equipment to a centralized SCADA system. This, in turn, will inform the on call Duty Operator of any problems associated with the lift stations on a 24/7 basis.

D. General

If at any time the Duty Operator, Environmental Compliance Supervisor or the Chief Utility System Operator cannot be reached, the Environmental Services Manager or Utilities Superintendent should be contacted.

RESPONDING TO A SERVICE CALL

A. Responder's Role

1. Protect public health and property from sewage spills and restore area back to normal as soon as possible.
2. Establish perimeters and control zones with cones, barricades, vehicles or terrain.
3. Contain sewage discharge to the maximum extent possible. Every effort must be made to prevent the discharge of sewage into surface waters.

Promptly notify Environmental Compliance Supervisor or Chief Utility System Operator of preliminary spill information and potential impacts.

B. <u>Responder's Primary Duties</u>

1. Be sure to obtain adequate information from the dispatcher, including the name, address and telephone number of person who registered the complaint and the nature of the problem.
2. Review City map to determine location of sewers in the area of the reported overflow or problem.
3. Upon arrival at the site of problem look for apparent overflows. If an overflow or surcharged sewer main is located, check downstream manholes until a dry (normal flow or less) manhole is located. If a second person is needed to assist in clearing a stoppage, the responder should contact a second person.
4. Using the appropriate cleaning equipment, work upstream from the dry manhole to clear the blockage (in some cases it may be necessary to work downstream from the last surcharged manhole). The line should be cleaned after clearing the blockage, and cleaned again the following work day. Observe flows to ensure blockage does not reoccur downstream. Stay at job site until flows return to normal.
5. Contact homeowner or person who reported the problem. If damage or overflow onto private property exists, refer to the "Claim Presented to the City of Pleasanton" form (Attachment A). Where sewage has overflowed out of a manhole or cleanout, contain the area and collect all flow, paper and solids possible. Flush manhole steps and shelves to clear debris whether or not overflows have occurred. Video inspect line to help determine cause of the overflow.

<u>OVERFLOW RESPONSE</u> – *QUICK REFERENCE* **(See Attachment B)**

A. <u>Relieve the Cause of the Overflow</u>

1. Relieve the stoppage as soon as possible.
2. Refer to and follow all Safety Regulations.

B. <u>Get Help if Necessary</u>

1. Call additional Utilities personnel.
2. Call Utilities Division Managers.
3. Call Street Division Personnel.
4. Call mutual aid agency personnel.

C. <u>Spill Containment and Recovery</u>

1. Install air plugs on storm drains whenever appropriate to contain the spill.
2. Divert spill with portable dams and/or by building small berms to change direction of flow back to sewer.

3. Divert spill by pumping around overflow and return to sewer.
4. Contain spill by letting it collect in naturally low area and recover sewage when time permits.
5. Dike/Dam spill by sandbagging or building dirt berm to collect spill.

D. Cleanup and Disinfection

1. Flush the area with potable water.
2. All sewage and flush water should be recovered by VAC truck or contained and returned to the sanitary sewer.

E. Sign Posting and Barricading

1. Where contamination is significant in areas accessible to the general public, post the "Warning/Spill" signs (Attachment C) and block off the contaminated areas with yellow caution tape.
2. Do not remove signs until the results of the lab tests assess the extent and severity of any contamination and risk to the general public.

F. Sampling and Lab Tests

1. Follow Procedure "Sanitary Sewer Overflow – Water Quality Monitoring Program" (Attachment D)

OVERFLOW RESPONSE WHEN DAMAGE HAS OCCURRED

When, during a service call, it is found that a City sewer main has or is causing damage to private or public property, the **first priority must be to remove the stoppage and stop the inflow of sewage onto the property**. Where damage has occurred, the following steps should be taken after the stoppage is cleared:

1. Contact Utilities Division Superintendent and describe the conditions found, the extent of the damage. If unable to contact the Supervisor, call the Director of Operations Services. Summon other employees for assistance if necessary.
2. The Utilities Division Superintendent will notify the Director of Operations Services if there is damage or possible damages which may result in a major claim.
3. **Do NOT acknowledge or discuss liability or responsibility for damages.** Refer these questions to the Environmental Services Manager, Utilities Division Superintendent or the Director of Operations Services.
4. Where flooding has occurred on public properties (streets, parks, school grounds, creek beds, etc.) remove any visible signs of the flooding by containing, washing down with potable water, and vacuuming the areas affected.
5. Where damage to private property occurs, provide a copy of a "Claim Presented to the City of Pleasanton" form (Attachment A)

6. Record damages with a video camera recorder. The responder may also take still photographs, if deemed necessary.

The responder will file a complete written report with the Environmental Compliance Supervisor, describing details of the service call, who responded, what was found, and what was done. The Environmental Services Manager shall investigate the report and manage the initial claims process.

DOCUMENTATION OF A SPILL

A. Provide accurate flow measurements and estimate duration of spill.

It is extremely important to apply logic or a scientific approach when estimating Flow

1. If the flow is coming from a cleanout or a broken line, count the number of upstream connections and estimate the time that the flow has been occurring. Remember that the flow was probably flowing before it was noticed and reported. Each residence contributes between 160 and 200 gallons per day or about 8 gallons per hour/ (depending on the time of the day). Assuming no flow is going through the plug/break, multiply the number of residences by estimated gallons per hour times the number of hours. This gives you an approximate number of gallons.
2. If the flow is coming from a manhole, use the San Diego manhole overflow visual estimator to estimate the flow. (Attachment E).
3. If the flow is coming from a pump station, use the previous day's flow and pump capacity to estimate the flow. Refer to SCADA information.
4. Another Estimating tool is to know that a 5/8 inch residential hose runs at about 11 gallons per minute.

B. Provide map of problem location

All manhole(s) involved - and where the spill discharged (e.g., storm drain, field, stream).

C. Take photos of events, if possible.

D. Complete the City Sewage Initial Overflow Report, (Attachment B).

Submit report to the Supervisor of Field Maintenance as soon as possible.

E. Complex claims will be referred to the District's Claims Agent.

RESOURCES AND CONTACTS

A. Available Resources at the Operations Center

Sandbags – palletized and raw materials, Yellow Caution Tape, Warning/Spill Signs
Barricades, Lighting, portable pumps, portable generators

B. <u>Utilities Division Personnel Contacts (Contact as situation dictates)</u>

Each Month a "Utilities Division Standby" sheet is distributed. This sheet updates all existing and future Duty Operators and provides staff with current contact numbers and data. Table 6-1 provides phone contacts as they currently exist.

Table 6-1 Emergency Personnel Phone Numbers

Person	Cell Phone
Eric Amaro	707.315.9137
Dan Pettinichio	510.828.8328
Ryan Ravalin	925.354.0476
Jeff Ballou	925.437.3604
Scott Walker	925.998.2469
Dan Martin	925.354.0477
Leo Lopez	925.570.1420
Daniel Smith	925.437.3603

Pleasanton Fire 454-2361
Pleasanton Police 931-5100
Ponte Engineering (408) 204-5269 (Cell)

MANDATORY SSO REPORTING REQUIREMENTS

A. SSO Categories

1. Category 1 – Spills of any volume that reaches surface water.
2. Category 2 – Spills greater than or equal to 1,000 gallons that do not reach surface water.
3. Category 3 – Spills less than 1,000 gallons that do not reach surface water.
4. Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately owned lateral (voluntarily reporting to SWRCB).

B. SSO Notification Timeframe

Refer to SWRCB Monitoring and Reporting Program (Table 6-3)

C. 2-hour Notification for Category "1" Spills

For Category 1 spills greater than or equal to 1,000 gallons, call California Office of Emergency Services (Cal OES) to report overflow and to obtain control number. (800) 852-7550 or (916) 845-8911

Following initial notification, update Cal OES of any substantial changes to estimated volume or known impacts of spill.

Additional Notification Telephone Number List

Local Health Officers: Alameda County Health. Cynthia Bartus, Supervising Environmental Health Specialist (M-F 8-5) (510)567-6714

D. Water Quality Monitoring

For spills greater than or equal to 50,000 gallons that reach surface water a Water Quality Monitoring must be conducted within 48 hours of Sanitary Sewer Overflow.

Follow Procedure "Sanitary Sewer Overflow – Water Quality Monitoring Program (Attachment D)

Submit **SSO Technical Report** within 45 days of spill.

F. Records to be maintained by City

1. Keep records for at least five years from the date of the SSO.
2. Note: The five-year time period may be extended by SFRWQCB if there is an unresolved enforcement action.

REPORTING RESPONSIBILITY

A. Electronic Reporting to CIWQS (California Integrated Water Quality System)

All confirmed sanitary sewer overflows must be reported to the Environmental Services Manager or designee who will be responsible for notification and reporting to regulatory agencies. Notification and reporting requirements depend on the type of spill.

No Spill Certification

Even if there are no SSOs during the calendar month, the City must certify through CIWQS that there were no SSOs for the designated month. This "No Spill Certification" must be submitted within 30 days after the end of each calendar month.

CIWQS Questionnaire Annual Audit

The City must update the CIWQS Collection System Questionnaire annually, even if there are no changes.

Table 6-2 Summarizes SWRCB , Monitoring and Reporting Plan

Table 6-2. Summary of Communication Requirements for SSOs

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]

CATEGORY 1	**Discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from an enrollee's sanitary sewer system failure or flow condition that:** • **Reach surface water and/or reach a drainage channel tributary to a surface water; or** • **Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).**
CATEGORY 2	**Discharges of untreated or partially treated wastewater of <u>1,000 gallons or greater</u> resulting from an enrollee's sanitary sewer system failure or flow condition that <u>do not</u> reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.**
CATEGORY 3	**All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.**
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	**Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately owned sewer lateral</u> connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.**

Table 6-3. Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION	• Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.	Call Cal OES at: (800) 852-7550
REPORTING	• Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: Update and certify every 12 months.	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING	• Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to

		surface waters.
RECORD KEEPING	• **SSO event records.** • **Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP.** • **Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters.** • **Collection system telemetry records if relied upon to document and/or estimate SSO Volume.**	**Self-maintained records shall be available during inspections or upon request.**

VIII. FOG CONTROL PROGRAM

A. Introduction

This section of the SSMP evaluates the extent and nature of SSOs related to Fats, Oils, and Grease (FOG), the need for a FOG Control Program, and outlines the elements of the City's FOG Control Program.

B. Regulatory Requirements for FOG Control Section

State GWDR Requirement:

The collection system agency shall evaluate its service area to determine whether a FOG control program is needed. If the collection system agency determines that a FOG program is not needed, the collection system agency must provide justification for why it is not needed. If FOG is found to be a problem, the collection system agency must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. The FOG source control program shall include the following as appropriate:

(a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;

(b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;

(c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;

(d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, best management practices (BMP) requirements, record keeping and reporting requirements;

(e) Authority to inspect grease producing facilities, enforcement authorities, and determination of whether the collection system agency has sufficient staff to inspect and enforce the FOG ordinance;

(f) An identification of sewer system sections subject to FOG blockages and the establishment of a cleaning maintenance schedule for each section; and

(g) Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified in (f) above.

C. Nature and Extent of FOG Sources

The City has 268 commercial sources of FOG discharge to the collection system. Currently, one Environmental Compliance Supervisor and a recently added Environmental Compliance worker are both involved in the FOG Program inspections. The largest concentration of commercial FOG sources are the food service establishments (FSEs) located on Main Street in the downtown area. Some of the FSEs are

located in older buildings and have undersized grease traps. In addition, there are eating and drinking establishments, cafeterias, bakeries and, delis that are located throughout the City.

Although FOG is not the cause of a majority of the SSOs in the City of Pleasanton, it is the cause of some of the SSOs during the period of 2009-2013 and the City has determined that a FOG program provides for sound management of its sewer system.

D. FOG Control Program

Environmental Services Department FOG Control Program Elements

A. Sewer Line Cleaning

The City includes line segments that have had FOG-related SSOs or surcharging on the "Bad Spots" cleaning list (30-day, 90-day, semi-annual, and annual), which are used by the Utilities Division to schedule sewer lines preventive maintenance. The "Bad Spots" list is included in the Computerized Maintenance Management System (CMMS) are accessible by OSC staff, and are periodically updated based on information collected during maintenance activities (and particularly the results of video inspections). Such periodic updating allows the City to edit cleaning frequencies to the needs of the particular line segment and more effectively utilize maintenance resources.

B. Legal Authority – Ordinance

The Pleasanton Municipal Code (PMC) and Ordinance 1984 identify FOG-related prohibitions requirements. The FOG related municipal Codes are incorporated in Chapter 15.44

C. FSE Permits/Registration

The Environmental Services Division has identified all Food Service Establishments (FSE) in the City and performs sampling, inspection, and enforcement to verify compliance with Pleasanton Municipal Code and Best Management Practices. New or remodeled FSEs are identified in conjunction with the City Business License process.

D. FSE Inspections/Enforcement

1. Since 2008, the Environmental Services Division inspects all FSEs on an annual basis. Emphasis is on:
    a. Grease removal device (GRD) installation and maintenance
    b. Process information
    c. Grease management
    d. Best Management Practices

e. Stormwater pollution prevention

2. Enforcement actions are clearly outlined in the PMC 15.44.070, Enforcement elements include:
    a. Authority to Inspect
    b. Administrative Enforcement Powers
    c. Penalties for Violation

A summary of inspections and enforcement in the period of 2010 through 2013 is included in the following table:

Table 7-1 FSE Inspection and Enforcement

Year	Inspections	Enforcement Actions
2010	26	
2011	68	68
2012	237	118
2013	145	36

E. Grease Interceptor and Trap Installation Requirements

All GRDs installed or caused to be installed are sized in conformance with the currently adopted edition of the Uniform Plumbing Code (PMC 15.44.070).

F. Grease Interceptor and Trap Maintenance Requirements

All GRDs installed or caused to be installed shall be kept in good repair and shall be serviced and emptied of accumulated waste content as required in order to maintain minimum design capability. These devices should be inspected at least monthly but in no case shall the User fail to inspect and maintain every 60 days. The user shall maintain a written record of all inspection, maintenance, pumping and hauling activities. The user shall submit copies of these documents to the Environmental Services Manager on or before June 30th and December 31st of each year. The user shall also keep copies of these records for the preceding two years and shall make these records available for on-site inspection by the operations services director during all operating hours.

G. Grease Hauling and Disposal Requirements

It is unlawful for any person to dispose of any grease by discharge into any sanitary sewer or storm drainage system (PMC 15.44.030).

1. Environmental Services Inspectors review the contracted grease hauling and disposal company documents when conducting an FSE inspection.

2. FSEs that conduct self-cleaning of GRDs is provided guidance regarding proper disposal of the FOG.

H. Grease Hauling and Disposal Facilities

A listing of grease haulers and disposal facilities is available at http://www.calfog.org. Two Wastewater treatment plants accept hauled FOG products. These are City of Hayward Plant and East Bay Municipal Utility District (EDMUD) in Oakland.

I. Kitchen BMP Requirements

Kitchen BMP activities are observed and related inquiries are made during inspections of FSEs. All FSEs receive BMP documents regarding FOG reduction. These BMPs are bi-lingual.

J. Residential Program

Residential areas located in FOG "hot spots," as identified by the Wastewater Collections Crew, receive attention through the City's existing Operations and Maintenance Program. These facilities receive information on BMPs, and their effectiveness will be monitored.

K. Education and Outreach

FSEs are given Two Publications along with BMP literature they receive. These include, "Guidelines for Food Handling Establishments" and "How your food service facility can prevent stormwater pollution".

IX. SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

A. Introduction

This section outlines the City's programs and activities to provide adequate capacity.

B. Regulatory Requirements for the System Evaluation and Capacity Assurance Plan Section

State GWDR Requirement (SECAP)

The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

(a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events.

(b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria.

(c) Capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, inflow and infiltration (I/I) reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

(d) Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

C. System Evaluation and Capacity Assurance Plan

Evaluation –Sewer System Master Plan

The City completed a Sewer System Master Plan in 2007 (Master Plan). The master planning effort evaluated the capacity of the existing sanitary sewer system assets and provided capacity design criteria for future assets. The study included a sanitary sewer and flow monitoring and inflow and infiltration (I&I) analysis. The study concluded that no basins or sub-basins exceeded 5% inflow/infiltration into their sewage basin. Furthermore, the study concluded that the City's collection system does not appear to have high levels of ground water infiltration. Two basins were identified as prioritized areas of concern when corrective action is needed.

The City requires that redevelopment project proponents evaluate the offsite capacity impacts of their project through an engineering study.

Evaluation - Hydraulic Model

The City periodically monitors the flow in its sanitary sewer system to identify capacity deficiencies and to monitor the quantity of inflow and infiltration present. Overall, the City's collection system has adequate capacity to convey DWFs. Few deficiencies exist under dry weather flow conditions. Capacity deficiencies under WWF conditions represent less than 10 percent of the modeled collection system. The relatively few number of deficiencies can be attributed to a well-designed system without significant I/I problems.

Design Criteria

Section 13 of the City's Standard Specifications and details addresses requirements for materials and methods of installation for sanitary sewer mains (up to and including 15 inches (15") in diameter), laterals, manholes, and appurtenances within the City's sanitary sewer system. Capacity Enhancement Measures - Capital Improvement Program

City staff selected to improve the collection system to convey the PWWFs of the 10-year 24-hour design storm. The pipe criteria set for this alternative was to pass the PWWFs while allowing the surcharge level to rise up to one foot below the manhole rim elevation. A number of pipelines require improvements to meet the City's surcharge criteria. The recommended CIP includes several pipeline improvements and capacity upgrades at several pump stations. Prioritizing the required capital improvements for the City sewer collection system is an important aspect of the CIP. The CIP needs to be phased in a manner that provides the City with an economical and realistic approach to implementing the CIP. The recommended improvements were separated into 15 projects.

Schedule

The schedule for the City's capacity enhancement projects is included in the City's Capital Improvement Program.

X. MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

A. Introduction

This section of the SSMP outlines the process that the City will follow to evaluate the effectiveness of the SSMP and to identify updates that may be needed for a more effective program.

B. Regulatory Requirements for the Monitoring, Measurement, and Program Modifications Section

State GWDR Requirement:

The Enrollee shall:

(e) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;

(f) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;

(g) Assess the success of the preventative maintenance program;

(h) Update program elements, as appropriate, based on monitoring or performance evaluations; and

(i) Identify and illustrate SSO trends, including: frequency, location, and volume.

C. Performance Measures

The indicators that the City will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are:

- Total number of SSOs
- Number of SSOs by cause (roots, grease, debris, pipe or pump station failure, and other)
- Volume of sewage spilled, recovered and reaching water(s) of the state

D. Performance Monitoring and Program Changes

The City will evaluate the performance of its wastewater collection system and SSMP effectiveness annually using the performance measures described above. Results of the evaluation will be recorded on the SSMP Audit Form. The City will also evaluate the effectiveness of individual SSMP elements. The primary tool for documenting the evaluation will be the SSMP audit. The City will prioritize its actions and initiate changes to this SSMP and the related programs based on the results of the evaluation. Examples of changes that could result from ongoing evaluation include:

- Revisions to frequency of cleaning cycles and/or FSE inspections based on field observations and CCTV inspections
- Reprioritization of rehabilitation and replacement projects based on the results of CCTV inspection, manhole inspections, and capacity analysis.
- Implementation of new methods and procedures based on experience developed in-house and from other agencies.
- Continued use of Information Technology (GIS GPS, and CMMS) for Administrative and Field operations.

Table 9-1 Historical SSO Results. Mains only; PLSDs Excluded

Year	Total	Cause							Capture		
		Grease	Roots	Debris	Pipe Fail	Capacity	Pump Fail	Other	100%	Partial	0%
2008	5	1						4	5	0	0

2009	5	1	3	1					3	1	1
2010	3		1	1				1	2	1	0
2011	2	1						1	1	0	1
2012	1				1			1	1	0	0
2013	4	2	1	1					1	2	1

Table 9-2 History of Spill Volumes and Volumes Recovered

Year	Sanitary Sewer Overflows, each	Spill Volume, gallons	Volume Recovered, gallons	Percent Recovered
2008	5	3150	3150	100
2009	5	4580	2930	64
2010	3	1705	825	48
2011	2	280	80	29
2012	1	250	250	100
2013	4	3460	1245	36

XI. SSMP PROGRAM AUDITS

A. Introduction

This section of the SSMP outlines the process that the City will follow to evaluate the effectiveness of the SSMP to identify updates that may be needed for a more effective program.

B. Regulatory Requirements

State GWDR Requirement

As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

C. Audits

The audit covers each of the major sections of the SSMP. An Audit Checklist, adapted from a document developed by BACWA and based on the requirements of the GWDR is used. In addition to the Yes/No response to questions, the checklist provides space for each group of related questions to document any deficiencies and steps taken or planned to correct them. The comment spaces will also be used to document qualitative evaluations related to the particular element or sub-element. In this way, the audit serves as the primary tool for documenting SSMP effectiveness as prescribed per the SWRCB.

D. SSMP Updates

The City conducted annual audits of the SSMP from Calendar Year 2008 through 2013. Staff intends to perform bi-annual audits (Attachment F) in the first quarter beginning in 2015.

After 2015, **audits will be conducted every two years** in the first quarter of the year by the Legally Responsible Official (LRO). Other parties may be added to the future audit teams. The audit is retained by the Environmental Compliance Manager.

As part of the audit process, City staff will update critical information in the SSMP, such as contact information, names of the key staff in the response chain of communication, or other similar data as needed. A **comprehensive SSMP update will occur every 5 years**, as required by the GWDR.

Changes made to the SSMP will be documented in the SSMP Changes Log. See Table 10-1.

Table 10-1 Log of SSMP Updates and Changes

Date	SSMP Element #	Description of Update/Change Made	Person Authorizing Change

XII. COMMUNICATION PROGRAM

A. Introduction

This section of the SSMP outlines the process involved in communicating with interested members of the public regarding the development, implementation, and performance of this plan.

B. Regulatory Requirements for the Communication Program Section

The requirements for the Communication Program section of the SSMP are:

State GWDR Requirement

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

C. Communication during SSMP Development and Implementation

Communication of SSMP Development and Updates

The City Council will be involved will the approval process of this SSMP at a future Council Meeting. In advance of such approval, Operations Services personnel will be preparing a Report to Council that provides background information including regulatory drivers for SSMP development, SSMP purpose and content, relationship to existing City policy as described in the Sewer Management Sub-element of the City's General Plan, and the SSMP implement schedule. The Council report will be available to the general public through posting of the Council agenda on the City's official notice bulletin board, posting of the agenda and report on the City Council web page, and through the City Library and the City Clerk's Office. This future Council meeting will open to the public and included a period for public comment.

In October 2008, the City enacted Ordinance No. 1984 and added Section 15-44 to the Municipal Code to implement additional FOG Program elements. The proposed ordinance revisions were also publicly noticed and made available to the public through the channels listed above.

Ongoing Communication

Posting of Sewer Services on City Web Site: The City of Pleasanton maintains a website (http://www.cityofpleasantonca.gov) to inform the public about City Services, activities and events. Updates on the Operations Services and Environmental issues can be displayed there. The City's website is an effective communication channel for providing alerts and news to the public. The main page of the website provides important announcements, agendas and minutes for City Council meetings, and other key information for City residents

SSO Reporting: The Environmental Compliance Manager is responsible for reporting SSOs to Cal OES. Information on individual SSOs is available to the general public through a GIS-based application on the State Board's web site at http://gistest.waterboards.ca.gov/webmap/sso_pub.html

Citizen Interaction: Staff has a variety of opportunities to interact with the community at these functions: Earth Day at Kaiser Permanente, Alameda County Fair, First Wednesday Downtown Block Parties, and Community E-Waste Recycling Day

ATTACHMENT A

CLAIM PRESENTED TO THE CITY OF PLEASANTON

Please read the instructions on the back before completing. 1. Claimant's Name: (*Please Print)* _____ Claimant's Address: _____ City, State, Zip: _____ Day Phone: ( ) _____ Eve: ( ) _____	*Reserved* for Filing Stamp City Claim No.:

2. When did the damage or injury occur?
Month: Day: Year: Time: a.m. or p.m.

3. At which location did the damage or injury occur? Police Report No. (if available):
_____

4. a. What happened and why is the City responsible?
_____
_____
b. Name and position of responsible City Employee(s), if known: _____

5. What damage or injury occurred?
_____
_____
_____

6. Claim amount:
_____

7. How did you arrive at the amount claimed? Please attach documentation.
_____
_____

8. I declare that the information provided above is true and correct, and that this declaration was executed on _____, 20___, at _____ CA.
_____ *Signature of Claimant or Representative*

9. Official Notices and Correspondence - *If represented by an insurance company or an attorney, provide the following information:*
Name and Capacity: (*please print)* _____
Address: _____
City, State, Zip: _____
Day Phone: _____ Eve.: _____

ATTACHMENT A

PRESENTING A CLAIM TO THE CITY OF PLEASANTON

⇒ PLEASE TYPE OR PRINT CLEARLY ALL OF THE INFORMATION REQUESTED ON THE CLAIM FORM.

⇒ YOU MUST COMPLETE EACH SECTION OR YOUR CLAIM MAY BE RETURNED TO YOU AS INSUFFICIENT.

- The following provides specific instructions for completing each section of the claim form.

- Attach additional pages if you need more room to provide the requested information.

1. NAME AND MAILING ADDRESS OF CLAIMANT – State the full name and mailing address of the person(s) claiming damage or injury. Please include a daytime and evening telephone number.

2. WHEN DID THE DAMAGE OR INJURY OCCUR? – State the exact month, date, year, and approximate time (if known) of the incident which caused the alleged damage/injury.

Under State law, claims relating to causes of action for personal injury, wrongful death, property damage, and crop damage must be presented to the City of Pleasanton no later than six months after the incident date. A claim may be presented in person or by mail.

When filing a claim beyond the six-month period, you must explain the reason the claim was not filed within the six-month period. This explanation is called “application for leave to present a late claim”. In considering your claim, the City will first decide whether the late claim application should be granted or denied. (See Government Code Section 911.4 for the legally acceptable reasons a claim may be filed late.) Only if your late claim application is granted will the City then consider the merits of your claim.

Claims relating to any cause of action other than personal injury, wrongful death, property damage, and crop damage must be presented no later than one year after the incident date. (See Government Code Section 911.2).

3. AT WHICH LOCATION DID THE DAMAGE OR INJURY OCCUR? – Please include street address, city, county, intersection, etc. If possible, also include the Police Report number (if available).

4. WHAT HAPPENED AND WHY IS THE CITY RESPONSIBILE? – Please explain the circumstances that led to the alleged damage or injury. State all facts which support your claim that the City is responsible for the alleged damage or injury. If known, identify the name of the City Department(s) and/or City employee(s) that allegedly caused the damage or injury.

5. WHAT DAMAGE OR INJURY OCCURRED? – Provide in full a detailed description of the damage/injury that allegedly resulted from the incident. (What specific damage or injury do you claim resulted from the alleged actions?)

6. CLAIM AMOUNT: - State the specific total dollar amount you are claiming as result of the alleged damage/injury.

7. HOW DID YOU ARRIVE AT THE AMOUNT CLAIMED? – Provide a breakdown of how the total amount that you are claiming was computed. You may declare expenses incurred and/or future anticipated expenses. If you have supporting documentation (i.e., bills, payment receipts, cost estimates) please attach copies of them to your claim.

8. SIGNATURE: - The claim must be signed by the claimant or by the attorney/representative of the claimant. The City will not accept the claim without a proper signature. Government Code Section 910.2 provides: “The claim shall be signed by the claimant or by some person on his [or her] behalf.”

ATTACHMENT A

9. OFFICIAL NOTICES AND CORRESPONDENCE - Provide the name and mailing address of the person to whom all official notices and other correspondence from the City should be sent, only if other than claimant. Please provide telephone numbers for the representative, if applicable.

⇒ SUBMIT COMPLETED AND RELATED DOCUMENTATION TO: The City Clerk of the City of Pleasanton. Personal service of claims can be accomplished during regular City business hours 8:00 am to 5:00 pm, Monday through Friday (excluding City holidays). The claim may also be mailed to the City Clerk at P.O. Box 520, Pleasanton, CA 94566-0802.

⇒ If you wish to receive a stamped copy of your claim, return the form to the City Clerk with a cover letter along with a stamped, self addressed envelope informing the City of your request.

⇒ Within 45 days of the presentation of your claim, you will receive a letter from the City Attorney's Office responding to your claim.

If, after reading these instructions, you have questions or need additional information regarding the filing of a claim with the City Clerk of Pleasanton; please contact the City Clerk's staff at (925) 931-5027.

ATTACHMENT B

SSO Response Report Form

Work Order # _____

Incident Commander _____

Vaccon 119 _____

Vaccon 102 _____

Flusher 116A _____

TV Truck _____

Additional Personnel _____

☐ ArcMap showing Sewer and Storm Drain

☐ Digital Camera Required

Weather Conditions: ☐ Dry, ☐ Wet

Reporting Completed By _____

Date _____ Operator _____

Street Address _____ Cross Street _____

Pleasanton, Alameda County

Regional Water Quality Control Board: Region 2 - San Francisco Bay

SSO Start Time _____

CoP Utilities Notified Time _____

Operator Arrival Time _____

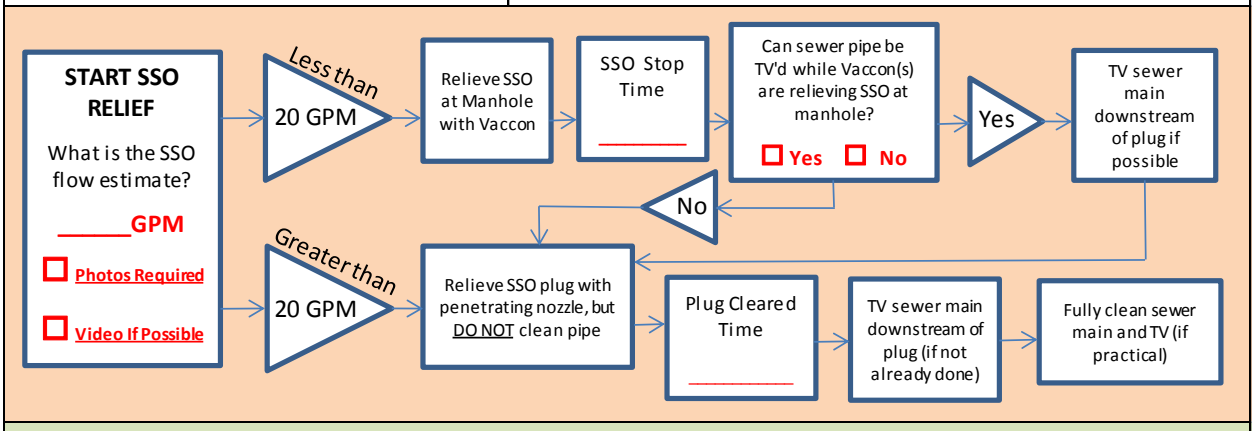
SSO Stop Time _____

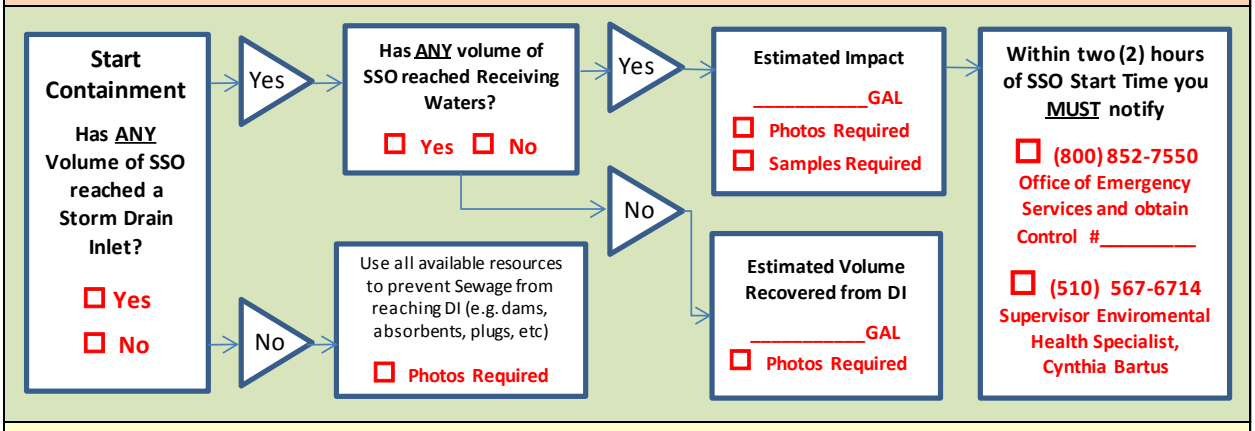
SSO Type
☐ Public
☐ Private

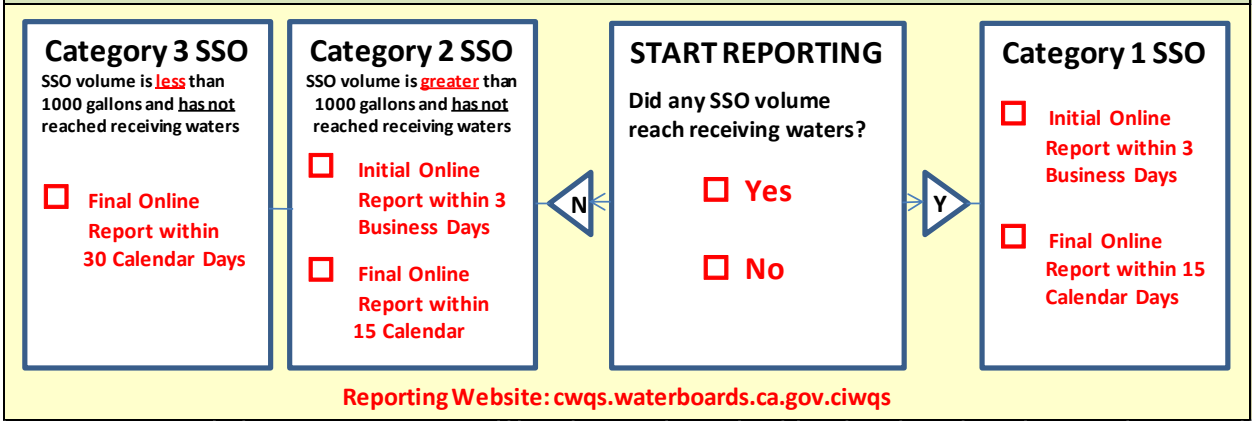
Did SSO reach Storm Drain? Y / N Did spill reach Receiving Waters? Y / N

Estimated Spill Volume (gal) _____

Estimated Spill Volume Recovered (gal) _____







ATTACHMENT C

This procedure is intended to comply with SWRQB requirements for surface water monitoring and reporting in the event of a spill greater than 50,000 gallons to surface water. It will outline the basic steps to be taken by City personnel. Additional steps may be necessary in some cases. The procedures must be used with common sense based on experience with the Collection System and applicable regulatory provisions.

Surface water monitoring and reporting is conducted by the Environmental Services Division of the Operations Services Department or specified alternate for spills to surface waters with a volume greater than 50,000 gallons.

PROCEDURES:

I. WATER QUALITY MONITORING

A. In the event of a spill to surface waters with a volume greater than 50,000 gallons, the Environmental Compliance Supervisor, Chief Utility System Operator, Environmental Services Manager, Utilities Division Superintendent, or highest ranking Utility Division crew member on duty, shall begin field monitoring of stream or channel affected by spill.

B. The Duty Operator or alternate (equipped with a DO meter, thermometer, and sample collection containers) is dispatched to the spill site for sampling and analysis as soon as can be safely and practically dispatched. Ideally, the sampling shall initiate within four hours. In no event should the testing be delayed beyond 48 hours of becoming aware of the SSO.

C. The Duty Operator or other responder establishes upstream and downstream sampling sites as appropriate based on site conditions (location of safe site access). If the waterway's source is well above the spill location and all access is safe, the upstream location shall be 100' upstream of the spill. In a case where the source of the waterway is within 100', the sample shall be taken as far upstream as allowed. The following in-stream analyses are completed for each sample site using analytical instrumentation:

1. Dissolved Oxygen (DO)
2. Temperature

A sample should be taken to the OSC and stored in the lab refrigerator and run for Ammonia as soon as possible.

Sampling for Enteric Virus and Coliform require Special techniques and handling.

Utilities personnel should make arrangements with DSRSD or City of Livermore labs for these tasks

D. In the event that the surface water body has inadequate depth or flow to measure 'in-stream', a representative sample should be taken into a sample container and then measured on site using the appropriate instrument.

E. The portable Dissolved Oxygen (DO) meter must be calibrated prior to its use in the field.

F. All maintenance and calibration records are maintained and stored in the OSC laboratory to insure instrumentation accuracy.

G. Results, sample locations notes, and other observations are recorded in a field notebook. Grab samples are collected from each site for laboratory analysis of fecal coliform, enterococcus, and ammonia. Fecal coliform, enterococcus and ammonia samples are assigned chain of custody forms that are completed throughout the sampling, analysis, and reporting process. DO and temperature are completed in the field and do not require a chain of custody.

H. A visual assessment of detrimental impacts such as fish kill, odor, and presence of visual spill material will be conducted and recorded in the field notebook. Site phots shall be taken of the sampling locations from two vantage points, at approximate right angles to each other. The individual taking the samples shall either take the phots directly, or mark the location so that photos can be taken at a later time by utility division personnel.

I. The visual assessment should also include an estimate to determine the rate of flow in the surface water. The estimate shall be made by either observing floating debris or by dropping adjacent vegetation into the stream and recording the distance traveled in 5 or 10 second intervals. The average cross section of the water body shall also be measured and recorded in the area where the velocity data is observed. The observed velocity and measured area shall be reported in the field notebook. The estimated flowrate (Q=V*A) shall be reported in the final technical report for the spill. The flowrate shall be estimated and incorporated into the final technical memorandum by the Utilities Division Superintendent.

J. Additional samples are taken each day for a total of ten days.

II. WATER QUALITY REPORT

A. For a Major Spill, the first week of daily water quality monitoring results is reported to the applicable Health Department within five days of completion of these samples. The results are transmitted by the Environmental Services Manager.

B. When all ten days' worth of laboratory results are available, the Environmental Services Manager shall incorporate the data into the Technical Report discussion and include the laboratory data in the Stream Monitoring Program Report Form for a Major Spill Event.

ATTACHMENT D

THE CITY OF PLEASANTON

Stream Monitoring Program Report Form for a Major Spill Event

Date Spill Occurred:	Samples Collected By:
Spill Amount:	
Date Spill Reported to EOS:	
Spill Location(*) Attach Map	
Name of Receiving Stream/Channel Affected:	

Upstream Sampling Location (100 Ft. Upstream-"Above Spill Description")

Above Spill Sample Data

Date	DO (mg/l)	Temp (deg C)	Ammonia (mg/l)	Enterococcus (#/100ml	Fecal Coliform (#/100 ml)
1-					
2-					
3-					
4-					
5-					
6-					
7-					
8-					
9-					
10-					

Downstream Sampling Location (100 Ft. Downstream-"Below Spill Description")

Below Spill Sample Data

Date	DO (mg/l)	Temp (deg C)	Ammonia (mg/l)	Enterococcus (#/100ml	Fecal Coliform (#/100 ml)
1-					
2-					
3-					
4-					
5-					
6-					
7-					
8-					
9-					
10-					

Reference Sheet for Estimating Sewer Spills
from Overflowing Sewer Manholes
All estimates are calculated in gallons per minute (gpm)
City of San Diego
Metropolitan Wastewater Department
Wastewater Collection Division
(619) 654-4160
5 gpm
25 gpm
50 gpm
100 gpm
150 gpm
200 gpm
225 gpm
250 gpm
275 gpm

City of Pleasanton
SSMP Audit Report Form

Introduction	Yes	No
Is the current system description complete and up to date? Are all infrastructure statistics current and complete?		
Discussion:		

	Element 1 – Goals	Yes	No
A	Are the goals stated in the SSMP still appropriate and accurate?		
Discussion:			

	Element 2 -- Organization	Yes	No
A	Is the Contact Information current?		
B	Is the Sanitary Sewer Overflow responder List current?		
C	Is the Organization Chart in Figure 2-1 of the SSMP current?		
D	Are the position descriptions an accurate portrayal of staff responsibilities?		
E	Is the chain of communication for reporting and responding to SSOs accurate and up-to-date?		

Element 2 -- Organization	Yes	No
Discussion:		

Element 3 – Legal Authority		Yes	No
Does the SSMP contain current references to the Pleasanton's Code documenting the City's legal authority to:			
A	Prevent illicit discharges?		
B	Require proper design and construction of sewers and connections?		
C	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City?		
D	Limit discharges of fats, oil and grease?		
E	Enforce any violation of its sewer ordinances?		
F	Were any changes or modifications made in the past year or since the last SSMP audit to City Ordinances, Regulations, or standards?		
Discussion:			

Element 4 – Operations and Maintenance		Yes	No
Collection System Maps			
A	Does the SSMP reference the current process and procedures for maintaining the City's sanitary sewer system maps?		
B	Are the City's wastewater collection system maps complete, current, and sufficiently detailed?		
Prioritized Preventive Maintenance			
C	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines?		
D	Based upon the SSO information in CIWQS and the Annual SSO Report, are the City's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?		
Rehabilitation and Replacement Program			
E	Is there an ongoing condition assessment program sufficient to rank the condition of sewer pipes and schedule rehabilitation? Are the current components of this program documented in the SSMP?		
F	Does the rehabilitation and replacement plan include a capital improvement plan that addresses proper management and protection of the infrastructure assets? Does the plan include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan?		
Contingency Equipment and Replacement Inventory			
G	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system?		
H	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?		
Training			
I	Are the training records current?		
J	Does the SSMP document current training expectations and programs?		

Element 4 – Operations and Maintenance	Yes	No
Discussion:		

	Element 5 – Design and Performance Standards	Yes	No
A	Does the SSMP reference current design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?		
B	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?		
Discussion:			

	Element 6 – Overflow and Emergency Response Plan	Yes	No
A	Does the City's Sanitary Sewer Overflow Response Plan (SSORP) contain proper notification procedures so that the primary responders and regulatory agencies are informed of all sanitary sewer overflows (SSOs) as required by the WDR and MRP?		
B	Does the SSORP have a program to ensure an appropriate response to all overflows?		
C	Does the SSORP contain procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities of all SSOs that potentially affect public health or reach waters of the State in accordance with the MRP? Does the SSMP identify the officials who will receive immediate notification of such SSOs?		

Element 6 – Overflow and Emergency Response Plan		Yes	No
D	Are staff and contractor personnel aware of the procedures of the SSORP?		
E	Does the SSORP contain procedures to address emergency operations such as traffic and crowd control and other necessary response activities?		
F	Does the SSORP ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge?		
G	Considering SSO performance data, is the SSORP effective in handling SSOs in order to safeguard public health and the environment?		
H	Is the Water Quality Monitoring Plan current? Have staff been trained and practiced on response to an SSO of large volume?		
I	Was sampling conducted within 48 hours for all SSOs greater than 50,000 gallons and were results entered for these SSOs through the CIWQS website?		
J	Has the City prepared a Technical Report for all SSOs larger than 50,000 gallons? Have all Technical Reports been filed on the CIWQS website as required?		
Discussion:			

ATTACHMENT F

	Element 7 – Fats, Oils, and Grease (FOG) Control Program	Yes	No
A	Does the Fats, Oils, and Grease (FOG) Control Program include a description of public education outreach efforts that promote proper handling and disposal of FOG?		
B	Does the FOG program include a plan for the disposal of FOG generated within the sewer system service area?		
C	Does the City have sufficient legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG?		
D	Are there requirements to install grease removal devices (such as traps or interceptors), best management practices (BMP) requirements, record keeping, maintenance requirements and reporting requirements established in the City's FOG Control Program?		
E	Does the City have authority to inspect grease producing facilities and have sufficient staff to inspect and enforce the FOG ordinance?		
F	Does the FOG control program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?		
G	Does the FOG control program implement source control measures for all sources of FOG discharged to the collection system?		
H	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?		
Discussion:			

Element 8 – System Evaluation and Capacity Assurance Plan		Yes	No
A	Does the System Evaluation and Capacity Assurance Plan evaluate hydraulic deficiencies in the system and provide estimates of peak flows associated with conditions similar to those causing overflow events, if applicable?		
B	Does the City's capital improvement program (CIP) establish a schedule of approximate completion dates for both short-term and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?		
C	Does the City take steps needed to establish a short and long-term CIP to address hydraulic deficiencies, including prioritization, alternatives analysis, and schedules? Are repair and replacement projects developed based upon condition assessment and/or field maintenance results?		
Discussion:			

Element 9 – Monitoring, Measurement, and Program Modifications		Yes	No
A	Does the City maintain relevant information that can be used to establish and prioritize appropriate SSMP activities?		
B	Does the City monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP?		
C	Does the City assess the success of the preventive maintenance program?		
D	Does the City update program elements, as appropriate, based upon monitoring or performance evaluations?		
E	Does the SSMP identify and illustrate SSO trends, including frequency, location and volume of SSOS?		
Discussion:			

	Element 10 – SSMP Audits	Yes	No
A	Does the audit focus on the effectiveness of the SSMP? If not, what needs to be changed to increase the effectiveness of the overall collection system program?		
B	Were the audit results shared with the City Council? And the public, via the City website?		
C	Will the SSMP Audit be completed, reviewed, and filed as an Appendix to the SSMP on a biennial basis?		
D	Do any proposed changes to the SSMP require Council approval if they have a substantial change in the policies and procedures for collection system operations and maintenance?		
Discussion:			

	Element 11 – Communication Program	Yes	No
A	Does the City communicate on a regular basis with the public and other agencies about the development and implementation of the SSMP? Does the communication system provide the public the opportunity to provide input as the program is developed and implemented? Were annual progress reports and metrics of implementation of the SSMP provided to the City Council?		
Discussion:			

	Change Log	Yes	No
A	Is the SSMP Change Log current and up to date?	**x**	
Discussion:			